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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,024	07/11/2003	Yasunari Watanabe	03500.017406	2715
5514	7590	10/14/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			NGO, HOANG X	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	

2852

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/617,024

**Applicant(s)**

WATANABE ET AL.

**Examiner**

Hoang Ngo

**Art Unit**

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/11/03</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Adachi et al.

Adachi et al disclose an image forming apparatus comprising an image bearing member 1, charging means 2 having AC voltage (Col. 10, line 23), control means 13 for controlling a peak to peak voltage of the AC voltage (Col. 10, line 46), developing means 4 having developer component 4e (Col. 7, line 7), residual charge eliminating means (i.e. exposing member 3) for conducting charge elimination on the image bearing member, wherein the control means controls the peak to peak voltage of the AC voltage which is applied to the charging means during an image forming period on the basis of an AC current flowing (i.e. alternating current value measuring circuit 14) when applying the AC voltage including the peak to peak voltage that is twice or less than a discharge start voltage  $V_{th}$  of the image bearing member to the charging means during a non-image forming period (Col. 10, lines 12-67), and the residual charge eliminating means conducts charge elimination on an area on the image bearing member that passes

Art Unit: 2852

through a charging position of the charging means when applying the AC voltage including the peak to peak voltage that is twice or less than the discharge start voltage  $V_{th}$  of the image bearing member to the charging means (Col. 10, line 53 thru Col. 11, line 20).

Adachi et al further disclose the control means controls on the basis of the AC current and the AC current flowing (Col. 10, lines 34-39), the charging means during the non-image forming period having a voltage value of a 0V (i.e. print preparation period, Col. 8, lines 6-24), when the image bearing member is in a developing position of the developing means, a voltage of such a level that a toner of the developer is non adhered to the image bearing member is applied to the developing means and the voltage applied is 0V and the voltage applied to the developing means is fixed when the developing means is in the developing position (Col. 7, lines 1- 26), the peak to peak voltage of the AC voltage applied to the charging means during the image forming period is twice or larger than  $V_{th}$  (Col. 11, lines 14-16), the non-image forming period is a preparatory rotation period of the image bearing member (Col. 8, lines 6-24), the residual charge eliminating means is electrostatic latent image forming means (i.e. exposing member 3), the residual charge eliminating means is exposure means and located on a downstream side of the charge means and an upstream side of the developing means with respect to the moving direction of the image bearing member (Fig. 1), the developing means is functioned as both the cleaning means and developing means (i.e. cleaner less system, Col. 15, lines 12-43) , a transfer means 5 functions as cleaning means and transfer means (Col. 15, lines 44-67), a developer charging

Art Unit: 2852

quantity control means 8, the charging means is brought into contact with the image bearing member during charging and the charging means conducts charging by causing discharge between the charging means and the image bearing member (Col. 1, line 37 thru Col. 2, line 20), the developing means performs developing by bringing the developer on the developing means into contact with the image bearing member (Col. 14, lines 53-65).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Ngo whose telephone number is (571) 272-2138. The examiner can normally be reached on 6:00am - 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoang Ngo  
Primary Examiner  
Art Unit 2852